

## **Pt. 1610**

(b) It shall be unlawful for any person to furnish, with respect to any wearing apparel or fabric, a false guaranty (except a person relying upon a guaranty to the same effect received in good faith signed by and containing the name and address of the person by whom the wearing apparel or fabric guaranteed was manufactured or from whom it was received) with reason to believe the wearing apparel or fabric falsely guaranteed may be introduced, sold, or transported in commerce, and any person who violates the provisions of this subsection is guilty of an unfair method of competition, and an unfair or deceptive act or practice, in commerce within the meaning of the Federal Trade Commission Act.

### **SHIPMENTS FROM FOREIGN COUNTRIES**

SEC. 9. Any person who has exported or who has attempted to export from any foreign country into the United States any wearing apparel or fabric which, under the provisions of section 4, is so highly flammable as to be dangerous when worn by individuals may thenceforth be prohibited by the Commission from participating in the exportation from any foreign country into the United States of any wearing apparel or fabric except upon filing bond with the Secretary of the Treasury in a sum double the value of said products and any duty thereon, conditioned upon compliance with the provisions of this Act.

### **INTERPRETATION AND SEPARABILITY**

SEC. 10. The provisions of this Act shall be held to be in addition to, and not in substitution for or limitation of, the provisions of any other law. If any provision of this Act or the application thereof to any person or circumstances is held invalid the remainder of the Act and the application of such provisions to any other person or circumstances shall not be affected thereby.

### **EXCLUSIONS**

SEC. 11. The provisions of this Act shall not apply (a) to any common carrier, contract carrier, or freight forwarder with respect to an article of wearing apparel or fabric shipped or delivered for shipment into commerce in the ordinary course of its business; or (b) to any converter, processor, or finisher in performing a contract or commission service for the account of a person subject to the provisions of this Act: Provided, That said converter, processor, or finisher does not cause any article of wearing apparel or fabric to become subject to this Act contrary to the terms of the contract or commission service; or (c) to any article of wearing apparel or fabric shipped or delivered for shipment into commerce for the purpose of finishing or processing to render such article or fabric not so highly flammable, under the

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provisions of section 4 of this Act, as to be dangerous when worn by individuals.

### **EFFECTIVE DATE**

SEC. 12. This Act shall take effect one year after the date of its passage.

### **AUTHORIZATION OF NECESSARY APPROPRIATIONS**

SEC. 13. There is hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act.

[40 FR 59889, Dec. 30, 1975]

## **PART 1610—STANDARD FOR THE FLAMMABILITY OF CLOTHING TEXTILES**

### **Subpart A—The Standard**

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### **Subpart C—Interpretations and Policies**

- 1610.61 Clarification of flammability standard for clothing textiles (CS 191-53).
- 1610.62 Reasonable and representative testing to assure compliance with the standard for the clothing textiles.

SOURCE: 40 FR 59891, Dec. 30, 1975, unless otherwise noted.

CODIFICATION NOTE: Part 1610 is a codification of the previously unpublished standard for flammability of clothing textiles, Commercial Standard 191-53, issued by the Department of Commerce, effective on January

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30, 1953. This flammability standard became mandatory through section 4(a) of the Flammable Fabrics Act, as amended in 1954, and remains in effect due to the savings clause (section 11) of Pub. L. 90-189. 16 CFR part 1609 contains the text of the Flammable Fabrics Act of 1953, as amended in 1954.

AUTHORITY: 16 U.S.C. 1191-1204, unless otherwise noted.

### Subpart A—The Standard

AUTHORITY: Sec. 5, Pub. L. 83-88, 67 Stat. 112, as amended, 68 Stat. 770 (15 U.S.C. 1193); sec. 11, Pub. L. 90-189, 81 Stat. 568.

NOTE: All fabrics of natural or regenerated cellulose, as well as certain types of finished and unfinished fabrics made from other natural or synthetic fibers, are combustible. Some combustible fabrics, when used for clothing, are potentially dangerous to the wearer because of the speed and intensity of flame with which those fabrics burn and their ease of ignition, and because of the design of the garment. Two of these factors, the ease of ignition and the speed of flame spread, can be measured with the instrument described herein.

It is suggested that measurement of these two factors, together with visual observation of flame intensity, will permit the separation of various fabrics into three classes of flammability, thus assisting in a judgment of fabric suitability for clothing.

#### § 1610.1 Purpose.

The purpose of this standard is to reduce danger of injury and loss of life by providing, on a national basis, standard methods of testing and rating the flammability of textiles and textile products for clothing use, thereby discouraging the use of any dangerously flammable clothing textiles.

#### § 1610.2 Scope.

(a) The standard provides methods of testing the flammability of clothing and textiles intended to be used for clothing.<sup>1,a,b</sup> establishes three classes of flammability, sets forth the require-

<sup>1</sup>Hereinafter, "clothing and textiles intended to be used for clothing" shall be referred to as "textiles."

<sup>a</sup>All the numbered footnotes are from the original printing by the Department of Commerce. All the lettered footnotes are new.

<sup>b</sup>Refer to sections 2 and 4 of the Flammable Fabrics Act of 1953, as amended in 1954, set out at 16 CFR part 1609, for the scope of the Standard.

ments which textiles shall meet to be so classified, and warns against the use of those textiles which have burning characteristics unsuitable for clothing.

(b) *Specific exceptions*— This standard shall not apply to:

- (1) Hats, gloves, and footwear.<sup>c</sup>
- (2) Interlining fabrics.<sup>2</sup>

#### § 1610.3 Requirements.

(a)(1) *Normal flammability, Class 1.* This class shall include textiles which meet the minimum requirements set forth in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section. Textiles meeting these requirements are generally accepted by the trade as having no unusual burning characteristics.

(i) *Textile without nap, pile, tufting, flock, or other type of raised-fiber surface.* Such textiles in their original state and/or after being dry-cleaned and washed as described in §§ 1610.4(d) and 1610.4(e), when tested as described in § 1610.4 shall be classified as Class 1, normal flammability, when the time of flame spread is 4 seconds<sup>d</sup> or more.

(ii) *Napped, pile, tufted, flocked, or other textiles having a raised-fiber surface.* Such textiles in their original state and/or after being dry-cleaned and washed as described in §§ 1610.4(d) and 1610.4(e), when tested as described in § 1610.4, shall be classified as Class 1, normal flammability, when the time of flame spread is more than 7 seconds, or when they burn with a rapid surface flash (from 0 to 7 seconds), provided the intensity of the flame is so low as not to ignite or fuse the base fabric.

<sup>c</sup>Refer to sections 2(d) and 4 of the Flammable Fabrics Act of 1953, as amended in 1954, set out at 16 CFR part 1609 for exceptions to this exception.

<sup>2</sup>Interlining fabrics are not considered dangerously flammable when used as interlinings. When used for other purposes they should be tested and rated the same as any other fabrics.

<sup>d</sup>On August 23, 1954, the Flammable Fabrics Act was amended, changing the test for the time of flame spread for plain-surfaced fabrics, provided in paragraphs 3.1.1.1 (now § 1610.3(a)(1)(i)) and 3.1.3.1 (now § 1610.3(a)(3)(i)), by reducing the burning time from 4 to 3½ seconds. For the purpose of the administration of that act, therefore, the 3½ second burning time for plain-surface fabrics is applicable.

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(2) *Intermediate flammability, Class 2.* This class shall include textiles which meet the minimum requirements set forth in paragraph (a)(2)(i) of this section. Textiles meeting these requirements are recognized by the trade as having flammability characteristics between normal and rapid and intense burning.

(i) *Napped, pile, tufted, flocked, or other textiles having a raised-fiber surface.* Such textiles in their original state and/or after being dry-cleaned and washed as described in §§1610.4(d) and 1610.4(e), when tested as described in §1610.4, shall be classified as Class 2, intermediate flammability, when the time of flame spread is from 4 to 7 seconds, both inclusive, and the base fabric ignites or fuses.

(3) *Rapid and intense burning, Class 3.* This class shall include textiles which have burning characteristics as described in paragraphs (a)(3)(i) and (a)(3)(ii) of this section. Such textiles are considered dangerously flammable and recognized by the trade as being unsuitable for clothing because of their rapid and intense burning.

(i) *Textiles free from nap, pile, tufting, flock, or other type of raised-fiber surface.* Such textiles in their original state and/or after being dry-cleaned and washed as described in §§1610.4(d) and 1610.4(e), when tested as described in §1610.4, shall be classified as Class 3, rapid and intense burning, when the time of flame spread is less than 4 seconds.<sup>e</sup>

(ii) *Napped, pile, tufted, flocked, or other textiles having a raised-fiber surface.* Such textiles in their original state and/or after being dry-cleaned and washed as described in §§1610.4(d) and 1610.4(e) when tested as described in §1610.4 shall be classified as Class 3, rapid and intense burning, when the time of flame spread is less than 4 seconds and when the intensity of flame is such as to ignite or fuse the base fabric.

### § 1610.4 Methods of test.

(a)(1) *Number and size of specimens required.* Five specimens, each measuring 2 by 6 inches, are required for each test.

<sup>e</sup>See footnote d.

(2) For textiles without a raised-fiber surface the long dimension shall be that in which they burn most rapidly, and the more rapidly burning surface shall be tested. To establish the long dimension and the surface, preliminary tests are made as described in paragraph (g) of this section, with specimens cut in different directions.

(3) For textiles having a raised-fiber surface, the direction of the lay of the surface fibers shall be parallel with the long dimension of the specimens. For this type of textiles with varying depths of pile, tufting, etc., the specimens are taken from that part and tested on that surface which has the fastest rate of burning.

(4) If the specimens in the preliminary test, when tested as described in paragraph (g) of this section, do not ignite or are very slow burning, or should have a fire-retarding finish, a swatch large enough to provide the specimens required for the test, with allowance for shrinkage in dry cleaning and washing, is subjected to the dry cleaning and washing procedures described in paragraphs (d) and (e) of this section. The specimens for the flammability test are then taken from it.

(5) The specimens required for testing, each 2 by 6 inches, are marked out on the back (or under side) of each sample with the long dimension in the direction in which burning is most rapid, as established in the preliminary trials. The end of the specimen toward which and on the face of which burning is most rapid is identified by attaching a staple to it. The specimens are then cut out.

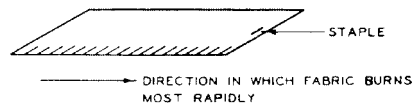


FIGURE 1—Specimen showing staple.

(b) *Flammability tester.* The flammability tester consists of a draft-proof ventilated chamber enclosing a standardized ignition medium, sample rack, and automatic timing device.

(1) *Draft-proof chamber with vented top* (A, fig. 2). This metal chamber prevents air circulation around the specimen

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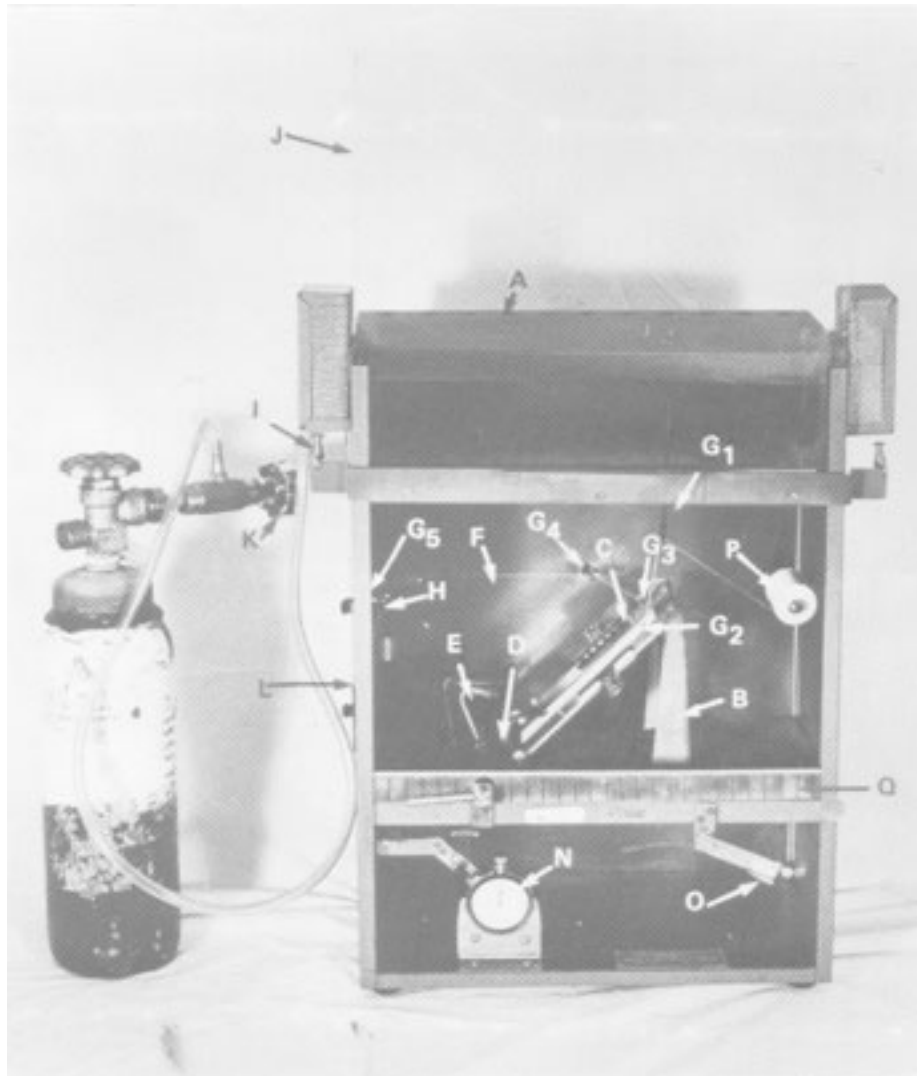
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rack and flame, but permits free ventilation for rapid oxidation. The chamber is 14½ inches wide, 8½ inches deep, and 14 inches high. There are 12 half-inch holes equidistant along the rear of the top closure. A ventilating strip is provided at the base of the sliding glass door in the front of the apparatus.

(2) *Specimen rack (B, fig. 2).* The specimen rack provides supports for the frames in which the specimens are mounted. The angle of inclination is 45°. Two guide pins projecting downward from the center of the base of the rack travel in slots provided in the floor of the chamber so that adjustment can be made for the thickness of the specimen in relation to the flame front. A stop is provided in the base of the chamber to assist in adjusting the position of the rack.

(3) *Specimen holder (C, fig. 2).* The specimen holder consists of two ¼ inch matched metal plates with clamps mounted along the sides, between which the specimen is fixed. The plates are slotted and loosely pinned for alignment. The two plates of the holder cover all but 1½ inches of the width of the specimen for its full length. The specimen holder is supported in the draft-proof chamber on the rack at an angle of 45°. Five specimen holders are provided.

(4) *Indicating finger (D, fig. 2).* The forepart of this finger touches the specimen when the rack is adjusted. By means of this finger the thickness of the specimen is compensated for in the throw of the gas nozzle.



(5) *Control knobs (not shown).* There are two of these knobs which hold the rack in test position. The knobs can be reached under the stage of the cabinet and permit forward and backward movements of the rack when loosened.

(6) *Ignition medium (E, fig. 2).* The ignition medium consists of a spring-motor-driven gas jet formed around a 26-gage hypodermic needle. A trigger located in the front of the apparatus

serves to wind the spring-motor when the machine is placed in operation. The gas jet is protected by a copper shield.

(7) *Stop cord (F, fig. 2).* This cord, stretched from the spool (P, fig. 2) through suitable thread guides provided on the specimen frame and chamber walls, permits the lacing of the cord in the proper position exactly 5 inches from the point where the center of the ignition flame impinges on the

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test specimen. The stop cord consists of a No. 50 mercerized sewing thread and measures the rise and spread of the flame from the test specimen.

(8) *Pulley or eye* ( $G_5$ , fig. 2). The pulley or eye is the support and guide for the stop cord.<sup>g</sup>

(9) *Stop weight* ( $H$ , fig. 2). The weight, attached by means of a clip to the stop cord, in dropping actuates the stop motion.

(10) *Slide door control* ( $I$ , fig. 2). This knob moves the catch mechanism used to hold the sliding door in an open position for insertion of test specimen racks.

(11) *Slide door* ( $J$ , fig. 2). A glass door in its normal position slides in the grooves at the front of the cabinet.

(12) *Fuel-control valve* ( $K$ , fig. 2). This valve consists of a sensitive control device for regulating the fuel supply at the tank. The valve ends in a 1/2-inch male connection for attachment to the standard butane tank of 2 pounds capacity.

(13) *Flow meter* ( $L$ , fig. 2). A flow meter is used to bring the fuel supply to test level by means of the control valve. The flow meter consists of a U-shaped glass tube cut into the gas line in a manner to register the gas pressure delivered to the microburner. Attached to the case wall behind the flow meter is a movable metal plate with two parallel horizontal lines properly spaced for the desired flame length. When the pressure is off, the plate is so regulated that the liquid level in both sides of the U-shaped tube meets the lower line. When the test is made the pressure is so adjusted that the higher liquid level in the U-shaped tube meets the upper line.

<sup>g</sup>Other guides are specifically identified as the skyhook ( $G^1$ ), the L-shaped guides ( $G_2$ ,  $G_3$ ) and a pigtail guide ( $G_6$ ). See § 1610.61(c)(1) for a clarification of the stop cord position.

(14) *Butane, c.p., container*<sup>4</sup> ( $M$ , fig. 2). This fuel supply is a No. 4 cylinder of c.p. butane.

(15) *Stopwatch and timing mechanism* ( $N$ , fig. 2). This watch, by means of special attachments, is actuated to a start by connection with the gas jet ( $E$ , fig. 2). A driving mechanism on rear of cabinet ( $S$ , fig. 2) moves the gas jet to its most forward position and automatically starts the timing at the moment of flame impact. The falling weight ( $H$ , fig. 2), when caused to move by severance of cord ( $F$ , fig. 2), stops the watch. Timing is read directly.

(16) *Starting lever* ( $O$ , fig. 2). This lever is operated from left to right in one stroke and is released to operate the gas jet.

(17) *Cord supply* ( $P$ , fig. 2). This supply, consisting of a spool of No. 50 mercerized cotton sewing thread, is fastened to the side of the chamber and can be withdrawn by releasing the thumbscrew holding same in position.

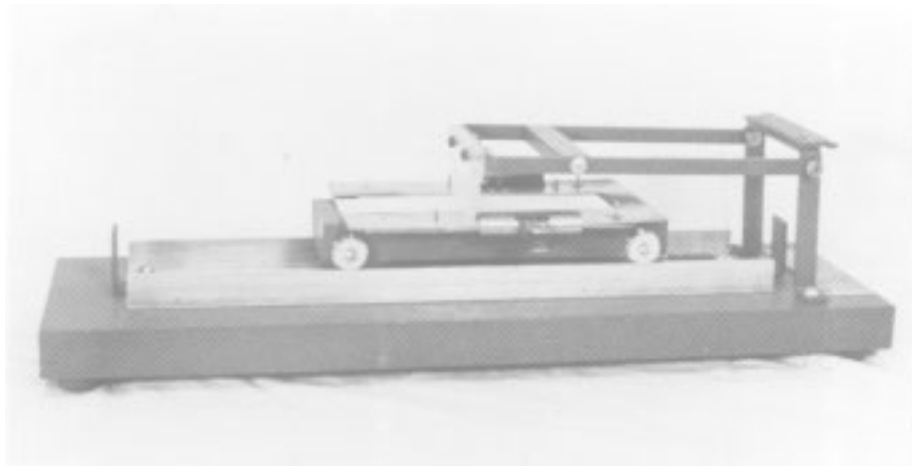
(18) *Cord loop* ( $G_4$ , fig. 2). At a point behind the stop cord ( $F$ , fig. 2), on the rear panel, there is installed another loop to draw the cord away from directly over the flame.

(19) *Draft ventilator strip* ( $Q$ , fig. 2). A draft ventilator strip is placed across the front opening, sealing the space between the sliding door when in lowered position and the base on which the grid rack is attached.

(c) *Brushing device*.<sup>h</sup> (1) This device consists of a baseboard over which a smaller carriage is drawn. This carriage runs on parallel tracks attached to the edges of the upper surface of the baseboard. The brush is hinged with pin hinges at the rear edge of the baseboard and rests on the carriage vertically with a pressure of 150 grams.

<sup>4</sup>Butane, c.p. No. 4 cylinders containing 2 pounds of butane may be obtained from, among others, the Matheson Co., Inc., East Rutherford, N.J.

<sup>h</sup>See § 1610.61(c)(2) for a clarification of the brushing technique for fabric with raised-fiber surfaces.

FIGURE 3—BRUSHING DEVICE. <sup>1</sup>

(2) The brush consists of two rows of stiff nylon bristles mounted with the tufts in a staggered position. The bristles are 0.016 inch in diameter and 0.75 inch in length. There are 20 bristles per tuft and 4 tufts per inch. A clamp is attached to the forward edge of the movable carriage to permit holding the specimen on the carriage during the brushing operation.

(3) After the specimen has been put in place on the carriage and fastened by means of the clamp, the brush is raised, the carriage pushed to the rear, and the brush lowered to the face of the specimen. The carriage is then drawn forward by hand at a uniform rate.

(d) *Dry cleaning.* A swatch from each sample, as mentioned in paragraph (a)(4) of this section, shall be subjected to the following dry-cleaning procedure.

(1) *Apparatus.* The apparatus is a cylinder, preferably of metal, approximately 13 inches high and about 8¾ inches in diameter (capacity 3 gallons). The cylinder is mounted in a vertical position on an axis which is inclined 50° to the axis of the cylinder, and is rotated about this axis at a speed of 45 to 50 revolutions per minute. <sup>1</sup>

<sup>1</sup>See footnote h; this picture is a reproduction of the figure published in the original

(2) *Cleaning procedure.* The apparatus is filled approximately one-third with perchlorethylene to which is added 270 ml of dry-cleaning soap. <sup>6</sup> The swatches and sufficient suitable worsted cloth, <sup>7</sup> in pieces of approximately 12 by 12 inches, to make a total dry load of 1 pound are placed in the apparatus. It is operated for 25 minutes. The solution is poured out, the apparatus refilled to approximately one-third with fresh perchlorethylene without soap, and the apparatus is operated for an additional

standard, and does not truly represent the Commission's interpretation of the proper position of the specimen during the brushing procedure (§1610.01(c)(2)). Specifically, the specimen in the picture appears to be below the level of the upper half of the specimen holder while the clarification requires the specimen to be placed above this level. Also §1610.61(c)(1) allows for the use of L-shaped guides.

<sup>6</sup>The soap shall be made by dissolving 56 grams of caustic potash (KOH) in 100 ml of water. The potassium hydroxide solution shall be poured slowly, with constant stirring, into a mixture of 340 grams of oleic acid, 400 ml of Stoddard solvent (Commercial Standard CS3-40 grade), and 100 ml of tertiary butyl alcohol or an equal quantity of butyl cellosolve.

<sup>7</sup>A suitable worsted test fabric known as Moth Test cloth may be obtained from Testfabrics, Inc., 55 Van Dam St., New York 13, N.Y.

5 minutes. This last operation is repeated three times. The swatches are then removed and the excess solvent removed from the swatches by any convenient means, such as rolling them between two layers of turkish toweling or between two layers of absorbent paper. They are then permitted to dry at room temperature.

(e) *Washing procedure.* The swatches, after being subjected to the dry-cleaning procedure (paragraph (d) of this section), shall then be immersed and worked gently for 5 minutes in a bath of soft water in which 0.5-percent neutral chip soap has been dissolved. The volume of the bath shall be 30 times the weight of the swatches and the temperature shall be between 95° and 100 °F. The swatches shall then be rinsed twice in water at 80 °F., extracted, and dried. The individual specimens, each 2 by 6 inches, are then cut out as described in paragraph (a)(5)

of this section and tested as described in paragraphs (f) and (g) of this section.

(f) *Brushing and drying specimens.* Each specimen having a raised-fiber surface, in its original condition or after dry cleaning and washing, is placed on the brushing device carriage (paragraph (c) of this section) and drawn under the brush once against the lay of the raised-fiber surface (see fig. 4). Other specimens do not require brushing. All specimens are clamped individually in the specimen holders of the flammability tester (paragraph (b)(3) of this section), with the staple on top and the stapled end at the closed end of the holder. They are then dried in a horizontal position in an oven for 30 minutes at 221 °F (105 °C), removed from the oven, and placed over anhydrous calcium chloride in a desiccator until cool, but for not less than 15 minutes.

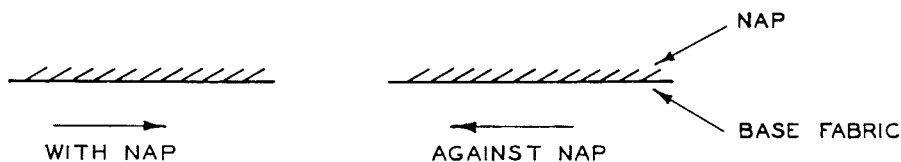


FIGURE 4—LAY OF NAP

(g) *Procedure for testing flammability.* (1) Adjust the position of the rack of the flammability tester (paragraph (b)(2) of this section) with a holder and trial specimen (not a prepared specimen) in position, so that the tip of the indicator finger touches the face of the specimen.

(2) Open the control valve in the fuel supply. Allow approximately 5 minutes for the air to be drawn from the fuel line, ignite the gas and adjust the flame to a length of  $\frac{3}{8}$  inch, measured from its tip to the opening in the gas nozzle.

(3) Remove the mounted specimen from the desiccator and place it in a position on the rack in the chamber of the apparatus.

(4) See that the stop cord (No. 50 cotton sewing thread) is strung through

the guides in the upper plate of the specimen holder across the top of the specimen, and through the guides at the rear of the chamber over the guide ring, and that the weight is hooked in place close to and just below the guide ring. Set the stop watch at zero. Close the door of the apparatus. Conduct the test in a draft-free room with the apparatus at room temperature.

(5) Bring the starting lever over to the extreme right and release it. This starts the timing mechanism and applies the flame to the specimen for a period of 1 second. This should be done within 45 seconds of the time the specimen was removed from the desiccator. Timing is automatic, starting upon application of the flame and ending when the weight is released by the burning of the stop cord.



(6) Record the time of flame spread (reading of stop watch) of each specimen and note whether the base of each specimen having a raised-fiber surface is ignited or fused to a point where the damage is apparent from the bottom of the specimen.

(7) *Results*—(i) *Time of flame spread*. The time of flame spread of the textile is taken as an average time for 5 specimens. Results of tests of specimens before and after dry cleaning and washing shall be recorded and reported separately. If the time of flame spread is less than 4 seconds<sup>8</sup> or if the specimens do not burn, test 5 additional specimens. The time of flame spread is then taken to be the average time for the 10 specimens or for as many of them as burn.

(ii) *Base fabric ignition or fusing*. Base fabric ignition or fusing of textiles having raised-fiber surfaces shall be reported when the base fabric of more than 1 of the 5 (or 2 of the 10) specimens tested ignites or fuses.<sup>9</sup>

(8) *Reporting results*. The reported result shall be the flammability before or after dry cleaning and washing, whichever is the lower; and, based on this result, the textile shall be placed in the proper classification as given in § 1610.3.

[40 FR 59891, Dec. 30, 1975, as amended at 59 FR 33194, June 28, 1994]

#### § 1610.5 Notes.

The methods of test and classifications outlined herein agree with all essential requirements of the Standard Test Method for Flammability of Clothing Textiles, of the American Association of Textile Chemists and Colorists.

<sup>8</sup>In the Flammable Fabrics Act, Congress adopted CS 191-53 as the Commercial Standard to be applied under the law.

On August 23, 1954, the Flammable Fabrics Act was amended, changing the test for the time of flame spread for plain-surfaced fabrics, provided in paragraphs 3.1.1.1 and 3.1.3.1 [codified as §§ 1610.3(a)(1)(i) and 1610.3(a)(3)(i)], by reducing the burning time from 4 to 3½ seconds.

For the purposes of the administration of that act, therefore, the 3½-second burning time for plain-surfaced fabrics is applicable.

<sup>9</sup>See § 1610.61(c)(3) for a clarification of the criterion for classification of Class 3.

## Subpart B—Rules and Regulations

AUTHORITY: Sec. 5, 15 U.S.C. 1194.

NOTE: An interpretation, with respect to Ornamental Veils or Veilings, issued by the Federal Trade Commission at 32 FR 11850, Aug. 17, 1967, provides as follows:

Ornamental millinery veils or veilings when used as a part of, in conjunction with, or as a hat, are not to be considered such a “covering for the neck, face, or shoulders” as would, under the first proviso of section 2(d) of the Flammable Fabrics Act, cause the hat to be included within the definition of the term “article of wearing apparel” where such ornamental millinery veils or veilings do not extend more than nine (9) inches from the tip of the crown of the hat to which they are attached and do not extend more than two (2) inches beyond the edge of the brim of the hat.

Where hats are composed entirely of ornamental millinery veils or veilings such hats will not be considered as subject to the Flammable Fabrics Act if the veils or veilings from which they are manufactured were not more than nine (9) inches in width and do not extend more than nine (9) inches from the tip of the crown of the completed hat.

#### § 1610.31 Terms defined.

As used in this part, unless the context otherwise specifically requires:

(a) The term *act* means the “Flammable Fabrics Act” (approved June 30, 1953, Pub. Law 88, 83d Congress, 1st sess., 15 U.S.C. 1191; 67 Stat. 111) as amended, 68 Stat. 770, August 23, 1954.

(b) The terms *rule*, *rules*, *regulations*, and *rules and regulations*, mean the rules and regulations prescribed by the Commission pursuant to section 5(c) of the act.

(c) The term *United States* means, the several States, the District of Columbia, the Commonwealth of Puerto Rico and the Territories, and Possessions of the United States.

(d) The terms *marketing or handling* means the transactions referred to in section 3 of the Flammable Fabrics Act, as amended in 1967.

(e) The terms *uncovered or exposed part* of an article of wearing apparel as used in section 4(a) of the act, mean that part of such article of apparel which might during normal wear be open to flame or other means of ignition.

NOTE: The outer surface of an undergarment is considered to be an uncovered or exposed part of an article of wearing apparel, and thus subject to the act.

(f) The term *textile fabric* means any coated or uncoated material subject to the act, except film and fabrics having a nitro-cellulose fiber, finish, or coating, which is woven, knitted, felted or otherwise produced from any natural or manmade fiber, or substitute thereof, or combination thereof, of two inches or more in width, and which is in a form or condition ready for use in wearing apparel.

(g) The term *plain surface textile fabric* means any textile fabric which does not have an intentionally raised fiber or yarn surface such as a pile, nap, or tuft, but shall include those fabrics having fancy woven, knitted or flock printed surfaces.

(h) The term *raised surface textile fabric* means any textile fabric which has an intentionally raised fiber or yarn surface such as a pile, nap, or tufting.

(i) The term *film* means any nonrigid, unsupported plastic, rubber or other synthetic or natural film or sheeting, subject to the Act, or any combination thereof, including transparent, translucent, and opaque material, whether plain, embossed, molded, or otherwise surface treated, which is in a form or condition ready for use in wearing apparel, and shall include film or sheeting exceeding 10 mils in thickness.

(j) The term *test* means the application of the relevant test method prescribed in the procedures provided under section 4(a) of the Act.

(k) [Reserved]

(l) The term *finish type* means a particular finish, but does not include such variables as changes in color, pattern, print, or design, or minor variations in the amount or type of ingredients in the finish formulation. Examples of finish types would be starch finishes, resin finishes or parchmented finishes.

(m) The definition of terms contained in section 2 of the Act shall be applicable also to such terms when used in rules promulgated under the act.

[40 FR 59891, Dec. 30, 1975, as amended at 49 FR 48683, Dec. 14, 1984]

#### § 1610.32 General requirements.

(a) No article of wearing apparel or fabric subject to the act and regulations shall be marketed or handled if such article or fabric, when tested according to the procedures prescribed in section 4(a) of the act, is so highly flammable as to be dangerous when worn by individuals.

(b) The provisions of §1610.4(g)(7) of the Standard for the Flammability of Clothing Textiles, relating to results of testing, shall be applied to tests of fabrics and articles of wearing apparel subject to the Standard. To compute the average time of flame spread for each set of five specimens, at least two of the specimens must ignite and burn the stop cord for the specimen. However, if fewer than two specimens of any given set of five ignite and burn the entire length of the specimen, test results shall be interpreted according to the provisions of paragraphs (b)(1) through (b)(4) of this section.

(1) If no specimen ignites and burns the stop cord, the results of that test shall be regarded as Class 1 (passing).

(2) If only one of five specimens of a plain surface fabric ignites and burns the stop cord with a time of 3.5 seconds or more, the results of that test shall be regarded as Class 1 (passing).

(3) If only one of five specimens of a raised-fiber surface fabric ignites and burns in less than 4 seconds, but the base does not ignite or fuse, the results of that test shall be regarded as Class 1 (passing). If only one of five specimens of a raised-fiber surface fabric ignites or burns in more than 4 seconds, regardless of whether the base fabric ignites or fuses, the results of that test shall be regarded as Class 1 (passing).

(4) If only one specimen ignites and burns the stop cord in less than 3.5 seconds for plain-surface fabrics or less than 4.0 seconds for raised-fiber surface fabrics where the base fabric ignites or fuses, test another set of five specimens. See §1610.4(g)(7). Compute the average time of flame spread for all 10 specimens. If two or more of the specimens ignite and burn the stop cord, average the results from all specimens which ignited and burned the stop cord. See §§1610.3(a)(3) and 1610.4(g)(7). If only one of the ten specimens ignites

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and burns the stop cord, the test is inconclusive. The Commission will take no enforcement action on the basis of that test. The Commission may conduct additional testing of the fabric or article of wearing apparel, but the results of any inconclusive test shall not be averaged with results obtained from any other test.

[50 FR 7761, Feb. 26, 1985; 50 FR 11848, Mar. 26, 1985]

### § 1610.33 Test procedures for textile fabrics and film.

(a)(1) All textile fabrics (except those with a nitro-cellulose fiber, finish or coating) intended or sold for use in wearing apparel, and all such fabrics contained in articles of wearing apparel, shall be subject to the requirements of the act, and shall be deemed to be so highly flammable as to be dangerous when worn by individuals if such fabrics or any uncovered or exposed part of such articles of wearing apparel exhibits rapid and intense burning when tested under the conditions and in the manner prescribed in subpart A of this part, and identified as "Flammability of Clothing Textiles, Commercial Standard 191-53".

(2) Notwithstanding the provisions of paragraph (a)(1) of this section, coated fabrics, except those with a nitro-cellulose coating, may be tested under the procedures outlined in part 1611, the flammability standard incorporated in the Commercial Standard promulgated by the Secretary of Commerce effective May 22, 1953, and identified as "General Purpose Vinyl Plastic Film, Commercial Standard 192-53", and if such coated fabrics do not exhibit a rate of burning in excess of that specified in § 1611.3 they shall not be deemed to be so highly flammable as to be dangerous when worn by individuals.

(b) All film, and textile fabrics with a nitro-cellulose fiber, finish or coating intended or sold for use in wearing apparel, and all film and such textile fabrics referred to in this rule which are contained in articles of wearing apparel, shall be subject to the requirements of the act, and shall be deemed to be so highly flammable as to be dangerous when worn by individuals if such film or such textile fabrics or any uncovered or exposed part of such arti-

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cles of wearing apparel exhibit a rate of burning in excess of that specified in part 1611, the flammability standard incorporated in the Commercial Standard promulgated by the Secretary of Commerce effective May 22, 1953, and identified as "General Purpose Vinyl Plastic Film, Commercial Standard 192-53."

### § 1610.34 Only uncovered or exposed parts of wearing apparel to be tested.

In determining whether an article of wearing apparel is so highly flammable as to be dangerous when worn by individuals, only the uncovered or exposed part of such article of wearing apparel shall be tested according to the applicable procedures set forth in section 4(a) of the act.

NOTE: If the outer layer of plastic film or plastic-coated fabric of a multilayer fabric separates readily from the other layers, the outer layer shall be tested under part 1611—Standard for the Flammability of Vinyl Plastic Film. If the outer layer adheres to all or a portion of one or more layers of the underlaying fabric, the multi-layered fabric may be tested under either part 1610—Standard for the Flammability of Clothing Textiles or part 1611. However, if the conditioning procedures required by § 1610.4(f) of the Standard for the Flammability of Clothing Textiles would damage or alter the physical characteristics of the film or coating, the uncovered or exposed layer shall be tested in accordance with part 1611.

Plastic film or plastic-coated fabric used, or intended for use as the outer layer of disposable diapers is exempt from the requirements of the standard, provided that a sample taken from a full thickness of the assembled article passes the test in the standard (part 1610 or part 1611) otherwise applicable to the outer fabric or film when the flame is applied to the exposed or uncovered surface. See §§ 1610.36(f) and 1610.11(f).

[50 FR 7761, Feb. 26, 1985]

### § 1610.35 Procedures for testing special types of textile fabrics under the standard.

(a) *Fabric not customarily washed or dry cleaned.* (1) Except as provided in paragraph (a)(2) of this section, any textile fabric or article of wearing apparel which, in its normal and customary use as wearing apparel would not be dry cleaned or washed, need not be dry cleaned or washed as prescribed in §§ 1610.4(d) and 1610.4(e) when tested

under the standard if such fabric or article of wearing apparel, when marketed or handled, is marked in a clear and legible manner with the statement: "Fabric may be dangerously flammable if dry cleaned or washed." An example of the type of fabric referred to in this paragraph is bridal illusion.

(2) Section 1610.4(a)(4), which requires that certain samples shall be dry cleaned or washed before testing, shall not apply to disposable fabrics and garments. Additionally, such disposable fabrics and garments shall not be subject to the labeling requirements set forth in paragraph(a)(1) of this section.

(b) A coated fabric need not, upon test under the procedures outlined in subpart A of part 1610, be dry cleaned as set forth in §1610.4(d).

(c) In determining whether a textile fabric having a raised-fiber surface, which surface is to be used in the covered or unexposed parts of articles of wearing apparel, is so highly flammable as to be dangerous when worn by individuals, only the opposite surface or surface intended to be exposed need be tested under the applicable procedures set forth in section 4(a) of the act, providing an invoice or other paper covering the marketing or handling of such fabric is given which clearly designates that the raised-fiber surface is to be used only in the covered or unexposed parts of articles of wearing apparel.

(d) A textile fabric which is less than six inches in width need only, upon test under the procedures outlined in subpart A of part 1610, be tested in a lengthwise direction.

[40 FR 59891, Dec. 30, 1975, as amended at 50 FR 51671, Dec. 19, 1985]

**§ 1610.36 Applications of act to particular types of products.**

(a) Fabrics intended or sold for processing into interlinings or other covered or unexposed parts of articles of wearing apparel shall not be subject to the provisions of section 3 of the act: *Provided*, That an invoice or other paper covering the marketing or handling of such fabrics is given which specifically designates their intended end use: *And provided further*, That with respect to fabrics which under the provisions of section 4 of the act, as amend-

ed, are so highly flammable as to be dangerous when worn by individuals, any person marketing or handling such fabrics maintains records which show the acquisition, disposition and intended end use of such fabrics, and any person manufacturing articles of wearing apparel containing such fabrics maintains records which show the acquisition, and use and disposition of such fabrics. Any person who fails to maintain such records or to furnish such invoice or other paper shall be deemed to have engaged in the marketing or handling of such products for purposes subject to the requirements of the act and such person and the products shall be subject to the provisions of sections 3, 6, 7, and 9 of the act.

(b) Fabrics intended or sold for use in those hats, gloves, and footwear which are excluded under the definition of articles of wearing apparel in section 2(d) of the act shall not be subject to the provisions of section 3 of the act: *Provided*, That an invoice or other paper covering the marketing or handling of such fabrics is given which specifically designates their intended use in such products: *And provided further*, That with respect to fabrics which under the provisions of section 4 of the act, as amended, are so highly flammable as to be dangerous when worn by individuals, any person marketing or handling such fabrics maintains records which show the acquisition, disposition, and intended end use of such fabrics, and any person manufacturing hats, gloves, or footwear containing such fabrics maintains records which show the acquisition, end use and disposition of such fabrics. Any person who fails to maintain such records or to furnish such invoice or other paper shall be deemed to have engaged in the marketing or handling of such products for purposes subject to the requirements of the Act and such person and the products shall be subject to the provisions of sections 3, 6, 7, and 9 of the act.

(c) Except as provided in paragraph (d) of this section, handkerchiefs not exceeding a finished size of twenty-four (24) inches on any side or not exceeding five hundred seventy-six (576) square inches in area are not deemed "articles of wearing apparel" as that term is used in the act.

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(d) Handkerchiefs or other articles affixed to, incorporated in, or sold as a part of articles of wearing apparel as decoration, trimming, or for any other purpose, are considered an integral part of such articles of wearing apparel, and the articles of wearing apparel and all parts thereof are subject to the provisions of the act. Handkerchiefs or other articles intended or sold to be affixed to, incorporated in or sold as a part of articles of wearing apparel as aforesaid constitute "fabric" as that term is defined in section 2(e) of the act and are subject to the provisions of the act which such handkerchiefs or other articles constitute textile fabrics as the term "textile fabric" is defined in § 1610.31(f).

(e) Where an article of wearing apparel has a raised-fiber surface which is intended for use as a covered or unexposed part of the article of wearing apparel but the article of wearing apparel is, because of its design and construction, capable of being worn with the raised-fiber surface exposed, such raised-fiber surface shall be considered to be an uncovered or exposed part of the article of wearing apparel. Examples of the type of products referred to in this paragraph are athletic shirts or so-called "sweat shirts" with a raised-fiber inner side.

(f) *Multilayer fabric and wearing apparel with a film or coating on the uncovered or exposed surface.* Plastic film or plastic-coated fabric used, or intended for use, as the outer layer of disposable diapers is exempt from the requirements of the standard, provided that a full thickness of the assembled article passes the test in the standard otherwise applicable to the outer fabric or film when the flame is applied to the exposed or uncovered surface.

NOTE: An interpretation to § 302.0(c) issued by the Federal Trade Commission, 30 FR 16106, Dec. 28, 1965, provides as follows:

"§ 1610.36(c) does not exclude products from the act on the sole basis of the size, description or designation of such product.

"If, because of construction, design, color, type of fabric, or any other factor, a piece of cloth of a finished type or any other product of a finished type appears to be likely to be used as a covering for the head, neck, face, shoulders, or any part thereof, or otherwise appears likely to be used as an article of clothing, garment, or costume, such product

is not a handkerchief and constitutes an article of wearing apparel as defined in and subject to the provisions of the Flammable Fabrics Act, irrespective of its size, or its description or designation as a handkerchief or any other term."

(Secs. 4, 5, 67 Stat. 112, 113, as amended, 68 Stat. 770, 81 Stat. 571, 90 Stat. 515 (15 U.S.C. 1193, 1194); sec. 30(b), 86 Stat. 1207 (15 U.S.C. 2079(b))

[40 FR 59891, Dec. 30, 1975, as amended at 50 FR 7762, Feb. 26, 1985]

## § 1610.37 Reasonable and representative tests to support guaranties.

(a) *Purpose.* The purpose of this § 1610.37 is to establish requirements for reasonable and representative tests to support initial guaranties of products, fabrics, and related materials which are subject to the Standard for the Flammability of Clothing Textiles (the Standard, 16 CFR part 1610).

(b) *Statutory provisions.* (1) Section 8(a) of the Flammable Fabrics Act (FFA, 15 U.S.C. 1197(a)) provides that no person shall be subject to criminal prosecution under section 7 of the FFA (15 U.S.C. 1196) for a violation of section 3 of the FFA (15 U.S.C. 1192) if such person establishes a guaranty received in good faith to the effect that the product, fabric, or related material complies with the applicable flammability standard. A guaranty does not provide the holder any defense to an administrative action for an order to cease and desist from violation of the applicable standard, the FFA, and the Federal Trade Commission Act (15 U.S.C. 45), nor to any civil action for injunction or seizure brought under section 6 of the FFA (15 U.S.C. 1195).

(2) Section 8 of the FFA provides for two types of guaranties:

(i) An initial guaranty based on "reasonable and representative tests" made in accordance with the applicable standard issued under the FFA; and

(ii) A guaranty based on a previous guaranty, received in good faith, to the effect that reasonable and representative tests show conformance with the applicable standard.

(c) *Requirements.* (1) Each person or firm issuing an initial guaranty of a product, fabric, or related material subject to the Standard shall devise

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and implement a program of reasonable and representative tests to support such a guaranty.

(2) The term *program of reasonable and representative tests* as used in this § 1610.37 means at least one test with results demonstrating conformance with the Standard for the product, fabric or related material which is the subject of an initial guaranty. The program of reasonable and representative tests required by this § 1610.37 may include tests performed before the effective date of this section, and may include tests performed by persons or firms other than the one issuing the initial guaranty. The number of tests and the frequency of testing shall be left to the discretion of the person or firm issuing the initial guaranty.

(3) In the case of an initial guaranty of a fabric or related material, a program of reasonable and representative tests may consist of one or more tests of the particular fabric or related material which is the subject of the guaranty, or of a fabric or related material of the same "class" of fabrics or related materials as the one which is the subject of the guaranty. For purposes of this § 1610.37, the term *class* means a category of fabrics or related materials having general constructional or finished characteristics, sometimes in association with a particular fiber, and covered by a class or type description generally recognized in the trade.

(d) *Exemptions.* Experience gained from years of testing in accordance with the Standard demonstrates that certain fabrics consistently yield acceptable results when tested in accordance with the Standard. Therefore, persons and firms issuing an initial guaranty of any of the following types of fabrics, or of products made entirely from one or more of these fabrics, are exempt from any requirement for testing to support guaranties of those fabrics:

(1) Plain surface fabrics, regardless of fiber content, weighing 2.6 ounces per square yard or more; and

(2) All fabrics, both plain surface and raised-fiber surface, regardless of weight, made entirely from any of the following fibers or entirely from combination of the following fibers: acryl-

ic, modacrylic, nylon, olefin, polyester, wool.

(Sec. 5, Pub.L. 90-189, 81 Stat. 569, 15 U.S.C. 1194; sec. 30, Pub.L. 92-573, 86 Stat. 1231, 15 U.S.C. 2079)

[49 FR 48689, Dec. 14, 1984; 50 FR 11847, Mar. 26, 1985]

### § 1610.38 Maintenance of records by those furnishing guaranties.

(a) Any person or firm issuing an initial guaranty of a product, fabric, or related material which is subject to the Standard for the Flammability of Clothing Textiles (the Standard, 16 CFR part 1610) shall keep and maintain a record of the test or tests relied upon to support that guaranty. The records to be maintained shall show:

(1) The style or range number, fiber composition, construction and finish type of each textile fabric or related material covered by an initial guaranty; or the identification, fiber composition, construction and finish type of each textile fabric (including those with a nitrocellulose fiber, finish or coating), and of each related material, used or contained in a product of wearing apparel covered by an initial guaranty.

(2) The results of the actual test or tests made of the textile fabric or related material covered by an initial guaranty; or of any fabric or related material used in the product of wearing apparel covered by an initial guaranty.

(3) When the person or firm issuing an initial guaranty has conducted the test or tests relied upon to support that guaranty, that person or firm shall also include with the information required by paragraphs (a) (1) and (2) of this section, a sample of each fabric or related material which has been tested.

(b) Persons furnishing guaranties based upon class tests shall maintain records showing:

(1) Identification of the class test.

(2) Fiber composition, construction and finish type of the fabrics, or the fabrics used or contained in articles of wearing apparel so guaranteed.

(3) A swatch of each class of fabrics guaranteed.

(c) Persons furnishing guaranties based upon guaranties received by them shall maintain records showing:

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(1) The guaranty received and identification of the fabrics or fabrics contained in articles of wearing apparel guaranteed in turn by them.

(d) The records referred to in this section shall be preserved for a period of 3 years from the date the tests were performed, or in the case of paragraph (c) of this section the guaranties were furnished.

(e) Any person furnishing a guaranty under section 8(a) of the act who neglects or refuses to maintain and preserve the records prescribed in this section shall be deemed to have furnished a false guaranty under the provisions of section 8(b) of the act.

(Sec. 5, Pub.L. 90-189, 81 Stat. 569, 15 U.S.C. 1194; sec. 30, Pub.L. 92-573, 86 Stat. 1231, 15 U.S.C. 2079)

[40 FR 59891, Dec. 30, 1975, as amended at 49 FR 48690, Dec. 14, 1984]

### § 1610.39 Shipments under section 11(c) of the act.

(a) The invoice or other paper relating to the shipment or delivery for shipment in commerce of articles of wearing apparel or textile fabrics for the purpose of finishing or processing to render them not so highly flammable as to be dangerous when worn by individuals, shall contain a statement disclosing such purpose.

(b) An article of wearing apparel or textile fabric shall not be deemed to fall within the provisions of section 11(c) of the act as being shipped or delivered for shipment in commerce for the purpose of finishing or processing to render such article of wearing apparel or textile fabric not so highly flammable under section 4 of the act, as to be dangerous when worn by individuals, unless the shipment or delivery for shipment in commerce of such article of wearing apparel or textile fabric is made direct to person engaged in the business of processing or finishing textile products for the prearranged purpose of having such article of apparel or textile fabric processed or finished to render it not so highly flammable under section 4 of the act, as to be dangerous when worn by individuals, and any person shipping or delivering for shipment the article of wearing apparel or fabric in commerce for such purpose maintains records

which establish (1) that the textile fabric or article of wearing apparel has been shipped for appropriate flammability treatment, and (2) that such treatment has been completed, as well as records to show the disposition of such textile fabric or article of wearing apparel subsequent to the completion of such treatment.

(c) The importation of textile fabrics or articles of wearing apparel may be considered as incidental to a transaction involving shipment or delivery for shipment for the purpose of rendering such textile fabrics or articles of wearing apparel not so highly flammable under the provisions of section 4 of the act, as to be dangerous when worn by individuals, if:

(1) The importer maintains records which establish (i) that the imported textile fabrics or articles of wearing apparel have been shipped for appropriate flammability treatment, and (ii) that such treatment has been completed, as well as records to show the disposition of such textile fabrics or articles of wearing apparel subsequent to the completion of such treatment.

(2) The importer, at the time of importation, executes and furnishes to the Bureau of Customs an affidavit stating:

These fabrics (or articles of wearing apparel) are dangerously flammable under the provisions of section 4 of the Flammable Fabrics Act, and will not be sold or used in their present condition but will be processed or finished by the undersigned or by a duly authorized agent so as to render them not so highly flammable under the provisions of section 4 of the Flammable Fabrics Act, as to be dangerously flammable when worn by individuals. The importer agrees to maintain the records required by 16 CFR 1610.39(c)(1).

(3) The importer, if requested to do so by the Bureau of Customs, furnishes an adequate specific-performance bond conditioned upon the complete discharge of the obligations assumed in paragraphs (c) (1) and (2) of this section.

NOTE: The purpose of section 11(c) is only to permit articles of wearing apparel or textile fabrics which are dangerously flammable to be shipped or delivered for shipment in commerce for the purpose of treatment or processing to render them not dangerously flammable. Section 11(c) does not in any other respect limit the force and effect of

sections 3, 6, 7, and 9 of the act. In particular, section 11(c) does not authorize the sale or offering for sale of any article of wearing apparel or textile fabric which is in fact dangerously flammable at the time of sale or offering for sale, even though the seller intends to ship the article for treatment prior to delivery to the purchaser or has already done so. Moreover, under section 3 of the act a person is liable for a subsequent sale or offering for sale if, despite the purported completion of treatment to render it not dangerously flammable, the article in fact remains dangerously flammable.

**§ 1610.40 Use of alternate apparatus, procedures, or criteria for tests for guaranty purposes.**

(a) Section 8(a) of the Flammable Fabrics Act (FFA, 15 U.S.C. 1197(a)) provides that no person shall be subject to criminal prosecution under section 7 of the FFA (15 U.S.C. 1196) for a violation of section 3 of the FFA (15 U.S.C. 1192) if that person establishes a guaranty received in good faith which meets all requirements set forth in section 8 the FFA. One of those requirements is that the guaranty must be based upon "reasonable and representative tests" in accordance with the applicable standard.

(b) The Standard for the Flammability of Clothing Textiles (the Standard) prescribes apparatus and procedures for testing fabrics and garments subject to its provisions. See 16 CFR 1610.4. The Standard prescribes criteria for classifying the flammability of fabrics and garments subject to its provisions as "Normal flammability, Class 1," "Intermediate flammability, Class 2," and "rapid and intense burning, Class 3." See 16 CFR 1610.3. Sections 3 and 4 of the Flammable Fabrics Act, as enacted in 1953 and amended in 1954, prohibits the manufacture for sale, importation into the United States, or introduction in commerce of any fabric or article of wearing apparel subject to the Standard which exhibits "rapid and intense burning" when tested in accordance with the Standard. See 16 CFR part 1609.

(c) The Commission recognizes that for purposes of supporting guaranties, "reasonable and representative tests" could be either the test in the Standard, or alternate tests which utilize apparatus or procedures other than those in the Standard. This § 1610.40 sets forth

conditions under which the Commission will allow use of alternate tests with apparatus or procedures other than those in the Standard to serve as the basis for guaranties.

(d)(1) Persons and firms issuing guaranties that fabrics or garments subject to the Standard meet its requirements may base those guaranties on any alternate test utilizing apparatus or procedures other than those in the Standard, if such alternate test is as stringent as, or more stringent than, the test in the Standard. The Commission considers an alternate test to be "as stringent as, or more stringent than" the test in the Standard if, when testing identical specimens, the alternate test yields failing results as often as, or more often than, the test in the Standard. Any person using such an alternate test must have data or information to demonstrate that the alternate test is as stringent as, or more stringent than, the test in the Standard.

(2) The data or information required by this paragraph (d) of this section to demonstrate equivalent or greater stringency of any alternate test using apparatus or procedures other than those in the Standard must be in the possession of the person or firm desiring to use such alternate test before the alternate test may be used to support guaranties of items subject to the Standard.

(3) The data or information required by paragraph (d) of this section to demonstrate equivalent or greater stringency of any alternate test using apparatus or procedures other than those in the Standard must be retained for as long as that alternate test is used to support guaranties of items subject to the Standard, and for one year thereafter.

(e) Specific approval from the Commission in advance of the use of any alternate test using apparatus or procedures other than those in the standard is not required. The Commission will not approve or disapprove any specific alternate test utilizing apparatus or procedures other than those in the Standard.

(f) Use of any alternate test to support guaranties of items subject to the



Standard without the information required by this section may result in violation of section 8(b)), of the FFA (15 U.S.C. 1197(b)), which prohibits the furnishing of a false guaranty.

(g) The commission will test fabrics and garments subject to the Standard for compliance with the Standard using the apparatus and procedures set forth in the Standard. The Commission will consider any failing results from compliance testing as evidence that:

(1) The manufacture for sale, importation into the United States, or introduction in commerce of the fabric or garment which yielded failing results was in violation of the Standard and of section 3 of the FFA; and

(2) The person or firm using the alternate test as the basis for a guaranty has furnished a false guaranty, in violation of section 8(b) of the FFA.

(Reporting requirements contained in paragraph (d) were approved by Office of Management and Budget under control number 3041-0024)

[48 FR 21315, May 12, 1983]

### Subpart C—Interpretations and Policies

#### § 1610.61 Clarification of flammability standard for clothing textiles (CS 191-53).

(a) *Background.* (1) The Flammable Fabrics Act, which became effective July 1, 1954 (Pub. L. 83-88, 67 Stat. 111-15), adopted Commercial Standard 191-53 as a mandatory flammability standard to be applied under that act (CS 191-53 had been a voluntary commercial standard, entitled "Commercial Standard 191-53, Flammability of Clothing Textiles," which became effective January 30, 1953).

(2) On August 23, 1954, the Flammable Fabrics Act was amended (68 Stat. 770) to reduce the burning time for flame spread as provided in CS 191-53.

(3) As amended and revised December 14, 1967 by Public Law 90-189 (81 Stat. 568-74), the Flammable Fabrics Act no longer specifically referred to CS 191-53; however, Public Law 90-189 contained a "savings clause" (section 11), which continued the applicability of any standard effective under the act theretofore until superseded or modified. No such change occurred there-

after to CS 191-53 which, accordingly, continues to be a mandatory flammability standard under the act.

(b) *Need for clarification.* It has been brought to the attention of the Consumer Product Safety Commission that lack of clarity in CS 191-53 regarding (1) the positioning of the stop cord, (2) the technique for brushing fabrics with raised-fiber surface, and (3) the criterion for failure of a fabric with a raised-fiber surface results in variations in the way tests are conducted or results are interpreted under the standard, thereby making both compliance with and enforcement of the standard under the Flammable Fabrics Act needlessly contentious.

(c) *Clarifying interpretations.* To alleviate this situation, the Consumer Product Safety Commission adopts the following interpretations on these subjects for CS 191-53:

(1) *Stop cord.* The stop cord shall be three-eighths of an inch above and parallel to the lower surface of the top plate of the specimen holder. This condition can be achieved easily and reproducibly with the use of L-shaped guides and an additional thread guide popularly referred to as a "sky hook." The essential condition, however, is the uniform height of three-eighths of an inch for the stop cord and not the number, placement, or design of the thread guides.

(2) *Brushing.* Brushing of a specimen shall be performed with the specimen mounted in a specimen holder. The purpose of the metal plate or "template" on the carriage of the brushing device is to support the specimen during the brushing operation. Accordingly, such template should be one-eighth of an inch thick.

(3) *Criterion for failure.* In the case of those fabrics having a raised-fiber surface for which a flame spread time of less than 4 +seconds occurs and is the result of surface burning (sometimes referred to as "surface flash"), the additional finding of base fabric ignition or fusion that is required to establish a failure shall have to be associated with the propagating surface flame and not the igniting flame.

(Sec. 1, et seq., 67 Stat. 111-15, as amended, 68 Stat. 770, 81 Stat. 568-74 (15 U.S.C. 1191-1204, note under 1191))

**§ 1610.62 Reasonable and representative testing to assure compliance with the standard for the clothing textiles.**

(a) *Background.* (1) The CPSC administers the Flammable Fabrics Act (FFA), 15 U.S.C. 1191-1204. Under the FFA, among other things, the Commission enforces the Flammability Standard for Clothing Textiles (the "general wearing apparel standard"), 16 CFR Part 1610. That standard establishes requirements for the flammability of clothing and textiles intended to be used for clothing (hereinafter "textiles").

(2) The general wearing apparel standard applies both to fabrics and finished garments. The standard provides methods of testing the flammability of textiles, and sets forth the requirements that textiles must meet to be classified into one of three classes of flammability (classes 1, 2 and 3). 16 CFR 1610.2. Class 1 textiles, those that exhibit normal flammability, are acceptable for use in clothing. 16 CFR 1610.3(a)(1). Class 2 textiles, applicable only to raised fiber surfaces, are considered to be of intermediate flammability, but may be used in clothing. 16 CFR 1610.3(a)(2). Finally, class 3 textiles, those that exhibit rapid and intense burning, are dangerously flammable and may not be used in clothing. 16 CFR 1610.3(a)(3). The manufacture for sale, offering for sale, importation into the U.S., and introduction or delivery for introduction of Class 3 articles of wearing apparel are among the acts prohibited by section 3(a) of the FFA, 15 U.S.C. 1192(a).

(3) CPSC currently uses retail surveillance, attends appropriate trade shows, follows up on reports of non-compliance and previous violations, and works with U.S. Customs in an effort to find textiles that violate CPSC's standards. The Commission has a number of enforcement options to address prohibited acts. These include bringing seizure actions in federal district court against violative textiles, seeking an order through an administrative proceeding that a firm cease and desist from selling violative garments, pursuing criminal penalties, or seeking the imposition of civil penalties for "knowing" violations of the FFA. Of

particular relevance to the latter two remedies are whether reasonable and representative tests were performed demonstrating that a textile or garment meets the flammability standards for general wearing apparel. Persons who willfully violate flammability standards are subject to criminal penalties.

(4) Section 8(a) of the FFA, 15 U.S.C. 1197(a), exempts a firm from the imposition of criminal penalties if the firm establishes that a guaranty was received in good faith signed by and containing the name and address of the person who manufactured the guaranteed wearing apparel or textiles or from whom the apparel or textiles were received. A guaranty issued by a person who is not a resident of the United States may not be relied upon as a bar to prosecution. 16 CFR 1608.4. The guaranty must be based on the exempted types of fabrics or on reasonable and representative tests showing that the fabric covered by the guaranty or used in the wearing apparel covered by the guaranty is not so highly flammable as to be dangerous when worn by individuals, *i.e.*, is not a class 3 material.<sup>1</sup> Under 16 CFR 1610.37, a person, to issue a guaranty, should first evaluate the type of fabric to determine if it meets testing exemptions (16 CFR 1610.37(d));<sup>2</sup> if not, the person issuing the guaranty must devise and implement a program of reasonable and representative tests to support the guaranty. The number of tests and frequency of testing is left to the discretion of that person, but at least one test is required.

(5) In determining whether a firm has committed a "knowing" violation of a flammability standard that warrants imposition of a civil penalty, the CPSC

<sup>1</sup>The person proffering a guaranty to the Commission must also not, by further processing, have affected the flammability of the fabric, related material or product covered by the guaranty that was received.

<sup>2</sup>Some textiles never exhibit unusual burning characteristics and need not be tested. 16 CFR 1610.37(d). Such textiles include plain surface fabrics, regardless of fiber content, weighing 2.6 oz. or more per sq. yd., and plain and raised surface fabrics made of acrylic, modacrylic, nylon, olefin, polyester, wool, or any combination of these fibers, regardless of weight.

considers whether the firm had actual knowledge that its products violated the flammability requirements. The CPSC also considers whether the firm should be presumed to have the knowledge that would be possessed by a reasonable person acting in the circumstances, including knowledge that would have been obtainable upon the exercise of due care to ascertain the truth of representations. 15 U.S.C. 1194(e). The existence of results of flammability testing based on a reasonable and representative program and, in the case of tests performed by another entity (such as a guarantor), the steps, if any, that the firm took to verify the existence and reliability of such tests, bear directly on whether the firm acted reasonably in the circumstances.

(b) *Applicability.* (1) When tested for flammability, a small number of textile products exhibit variability in the test results; that is, even though they may exhibit class 1 or class 2 burning characteristics in one test, a third test may result in a class 3 failure. Violative products that the Commission has discovered since 1994 include sheer 100% rayon skirts and scarves; sheer 100% silk scarves; 100% rayon chenille sweaters; rayon/nylon chenille and long hair sweaters; polyester/cotton and 100% cotton fleece/sheerpa garments, and 100% cotton terry cloth robes. Since August 1994, there have been 21 recalls of such dangerously flammable clothing, and six retailers have paid civil penalties to settle Commission staff allegations that they knowingly sold garments that violated the general wearing apparel standard.

(2) The violations and resulting recalls and civil penalties demonstrate the critical necessity for manufacturers, distributors, importers, and retailers to evaluate, prior to sale, the flammability of garments made from the materials described above, or to seek appropriate guaranties that assure that the garments comply. Because of the likelihood of variable flammability in the small group of textiles identified above, one test is insufficient to assure reasonably that these products comply with the flammability standards. Rather, a person seeking to evaluate garments made of such materials should

assure that the program tests a sufficient number of samples to provide adequate assurance that such textile products comply with the general wearing apparel standard. The number of samples to be tested, and the corresponding degree of confidence that products tested will comply, are to be specified by the individual designing the test program. However, in assessing the reasonableness of a test program, the Commission staff will specifically consider the degree of confidence that the program provides.

(c) *Suggestions.* The following are some suggestions to assist in complying with the general wearing apparel standard:

(1) Purchase fabrics or garments that meet testing exemptions listed in 16 CFR 1610.37(d). (If buyers or other personnel do not have skills to determine if the fabric is exempted, hire a textile consultant or a test lab for an evaluation.)

(2) For fabrics that are not exempt, conduct reasonable and representative testing before cutting and sewing, using standard operating characteristic curves for acceptance sampling to determine a sufficient number of tests.

(3) Purchase fabrics or garments that have been guaranteed and/or tested by the supplier using a reasonable and representative test program that uses standard operating characteristic curves for acceptance sampling to determine a sufficient number of tests. Firms should also receive and maintain a copy of the guaranty.

(4) Periodically verify that your suppliers are actually conducting appropriate testing.

[63 FR 42697, Aug. 11, 1998]

## PART 1611—STANDARD FOR THE FLAMMABILITY OF VINYL PLASTIC FILM

### Subpart A—The Standard

Sec.

1611.1 Purpose and scope.

1611.2 General description of products covered.

1611.3 Flammability—general requirement.

1611.4 Flammability test.